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They Answered Twice.
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A 9-item questionnaire was given to registering students for fall and spring 1969. For easier handling, its form was changed for the next semester. By accident, the two versions were handed out and 687 students answered both in quick succession. The staff decided to compare the two forms to see if the answers differed. Two questions were considered unsuitable for comparison. For the other seven, the frequency of differing replies ranged from 16 to 662. Three possible explanations were offered: (1) students do not take such questionnaires seriously, (2) they are unable to answer reliably, (3) angry at answering the same questions twice, they deliberately mis-answered the second time. If the first or second is right, such data gathering is a waste of time. If the third is right, the amount of data gathering should be reduced, assuming that the more questions a student must answer, the less reliable the replies. Point 3 will be re-examined in the fall 1969 semester, when both versions of the questionnaire will be given out at an interval of a few weeks. It is expected that, with the lapse of time, the student will feel no anger and may even forget he answered before. If marked differences in replies still show up, the matter should be pursued. While the format of a questionnaire does affect the way it is answered and may explain the differences found in this case, the value of the instruments is doubtful--for there is no way of knowing which format, if either, elicited reliable data. (HH)

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THEY ANSWERED TWICE

Project Follow-Through

July, 1969

Orange Coast Junior College District

JC 690 317

UNIVERSITY OF CALIF.
LOS ANGELES

AUG 28 1969

CLEARINGHOUSE FOR
JUNIOR COLLEGE
INFORMATION

This report documents the results of administering the same questions twice to the same respondents within a few minutes. The questionnaires used and the procedures followed are part of data gathering activities exercised by Project Follow-Through, a project sponsored in part by the California State Department of Education.

Procedures

Each semester, when enrolling for classes during the coming semester, students of the Orange Coast Junior College District are asked to complete an enrollment questionnaire as part of the semester registration procedure. Figure I shows two versions of the enrollment questionnaire. The upper version represents the form used during the Fall and Spring registration, 1968-69. After using this form, we decided, for ease in keypunching, to convert the form to a vertical format as illustrated in the lower version. This new version was used in the Summer, 1969, registration.

During the registration procedure for Summer, 1969, some of the old version enrollment questionnaires inadvertently found their way to the registration line. There, doubtless because of their different appearance, they were given to students registering along with the new version. As a result, 687 students responded to both versions of the enrollment questionnaire. It is doubtful that more than a few minutes elapsed between responding to the two questionnaires inasmuch as nearly all students complete the registration process with one visit to the place of registration.

This phenomenon was discovered while processing the questionnaires and it occurred to us that it would be interesting to count up the number of times each student answered the same question differently. This we did. The results, we think, are startling.

Results

Figure II shows a tabulation of responses to questions found in the enrollment questionnaires returned by the 687 students who answered both versions. The tabulation shows for all questions, save 4 and 6, the number of students who answered the question on the first version (A); the number who answered the question on the second version (B); and the number who, when answering the same question on both forms, answered it differently. Questionnaire item 4 is excluded from the tabulation because the question itself is not the same on both versions of the questionnaire. Question 6 is eliminated from the tabulation because it asks the respondent to look up a number in a table of major codes. We judged this to be so error prone that little, if anything, could be learned by comparing the different responses between versions of the questionnaire.

The frequency with which students answered the same question differently is striking, if not frightening. They range, as a percentage of 687, from 16 to 66. We have not measured these differences in terms of statistical significance mainly because the responses to the two questionnaire versions can hardly be construed as independent. The magnitude, however, of the number of differences makes us believe intuitively, for what it's worth, that they are meaningful.

Conclusions

Although we generally forbear offering conclusions based upon the statistics produced in the execution of Project Follow-Through, we can't resist acknowledging a few self-evident features of this casual study. At least three explanations come to mind with respect to the large number of different responses we find in this comparison:

1. Students do not take data gathering questionnaires seriously.

2. Students take data gathering questionnaires seriously, but are unable to answer questions reliably.

3. Students answering both versions of the enrollment questionnaire became angry at answering the same questions more than once and deliberately mis-answered the questions.

If 1 or 2 of the above prevail (and it doesn't really matter which), then we are ready to conclude that gathering data from students through the use of questionnaires, application forms, and similar techniques is so unreliable as to render the activity a waste of time.

If 3 prevails, it behooves us to take strenuous steps to clear registration procedures of redundant and unnecessary data gathering attempts. There is reason to believe that the more questions a registering student must answer, the less likely he is to answer them reliably.

We intend to examine point 3 more thoroughly. If students answering both versions became angry at answering questions twice and reacted in a recalcitrant fashion, then their answers should be more reliable if they were not angry when answering the questionnaire the second time.

During the registration for the Fall Semester, 1969-70, we will take advantage of an opportunity to issue both versions of the enrollment questionnaire to the same students at times separated by several weeks. The time lapse, we hope, will cool the respondents ire. Too, he may forget he answered the questions before.

A random sample of students will be given a different version of the enrollment questionnaire to answer for a second time when they return to confirm their summer-time registration shortly before school starts in the fall. If marked differences still prevail in the ways that they answer the questions, then we might suspect that anger is not the key and we should look elsewhere.

We are mindful of the important effects that questionnaire formats have upon the manner in which questions are answered. If the differences we have found with our enrollment questionnaires can be explained away as a result of format differences, then we are again ready to discount heavily the use of questionnaires and such devices as reliable data gathering instruments. After all, who is to say which of several formats will gather accurate data and which will not?

PROJECT FOLLOW-THROUGH, SEMESTER ENROLLMENT QUESTIONNAIRE

Name_____ I.D. No._____ Soc. Sec. No._____

1. If you are employed, how many hours weekly do you work? ☐ 0 ☐ 1-10 ☐ 11-20 ☐ 21-30 ☐ 31-40 ☐ 40 Plus
2. Approximately how much do you earn per week while attending college? $_____
3. Are you now seeking part-time employment (present job status not considered)? ☐ Yes ☐ No
4. If you are now working (or in the armed services) 30 or more hours per week, do you work
   ☐ In your major field ☐ In an unrelated field ☐ In a related field ☐ Working less than 30 hours per week
5. What are your transfer plans at this time? ☐ Non-transfer ☐ California State College ☐ California State University
   ☐ Private California College or University ☐ Out-of-State College or University
6. Write your major code here (see reverse side) _____
7. Will you complete your junior college program this semester? ☐ Yes ☐ No
8. At this time what is your career objective?
   ☐ Professional (five or more years of college) ☐ Educator ☐ Military ☐ Technician ☐ Athlete
   ☐ Corporate Executive ☐ Fine Arts ☐ Tradesman or Journeyman ☐ Self Employment ☐ Other ☐ Undecided
9. On what basis have you chosen your career objective? ☐ Parent's or guardian's advice ☐ Friend's advice
   ☐ College counselor's advice ☐ College instructor's advice ☐ Advice of high school teacher or counselor
   ☐ Your own determination ☐ Other ☐ Undecided on career objective

Project Follow-Through
Semester Enrollment Questionnaire

Name_____

I.D. No._____ Social Security No._____

1. If you are employed, how many hours weekly do you work?
   ☐ 0 ☐ 1-10 ☐ 11-20
   ☐ 21-30 ☐ 31-40 ☐ 40 Plus
2. Approximately how much do you earn per week while attending college? $_____
3. Are you now seeking part-time employment
   ☐ Yes ☐ No
4. If you are now working (or in the armed services) 30 or more hours per week do you work
   ☐ In your major field ☐ In an unrelated field
   ☐ Working less than 30 hours per week
5. What are your transfer plans at this time?
   ☐ Non-transfer ☐ California State College
   ☐ California State University
   ☐ Private California College or University
   ☐ Out-of-State College or University
6. Write your major code here (see reverse side) _____
7. Will you complete your junior college program this semester? ____Yes ____No
8. At this time what is your career objective?
   ☐ Professional (five or more years of college)
   ☐ Military ☐ Technician ☐ Athlete
   ☐ Corporate executive ☐ Fine Arts ☐ Educator
   ☐ Self employment ☐ Other ☐ Undecided
   ☐ Tradesman or Journeyman
9. On what basis have you chosen your career objective?
   ☐ Parent's or guardian's advice ☐ Friend's advice
   ☐ College counselor's advice ☐ Other
   ☐ College instructor's advice
   ☐ Advice of high school teacher or counselor
   ☐ Undecided on career objective
   ☐ Your own determination

Form SEQ—25M—4-69—S-B P

Figure 1

PROJECT FOLLOW-THROUGH

Duplicate Semester Enrollment Questionnaires

QUESTION NO.	ANSWERED-A	ANSWERED-B	DIFFERENT ANSWERS	
			Total	Percent Of 687
1	632	578	398	58
2	483	348	450	66
3	650	650	238	35
5	672	666	213	31
7	655	664	110	16
8	671	666	317	46
9	678	648	284	41

N = 687

Figure II